

DIRECT CONTACT LIQUID AIR CONTAMINANT CONTROL SYSTEM

ABSTRACT OF THE DISCLOSURE

5 The direct contact liquid air contaminant control system and method to
revitalize air by removal of carbon dioxide and other trace gas contaminants
use a direct contact air, liquid scrubber element and stripper element. The
scrubber element has two rotor elements rotatably mounted in a housing first
for centrifugal separation of an air flow and liquid absorbent mixture which liquid
10 absorbent has absorbed carbon dioxide and trace gas contaminants. Then
second for centrifugal separation of an air flow and acid water wash mixture
which acid water wash has liquid absorbent and other contaminants. The
processed air is then passed through a charcoal bed filter for further removal of
contaminants. A rotary contact processor may also be used to reprocess
15 contaminated liquid absorbent for reuse.